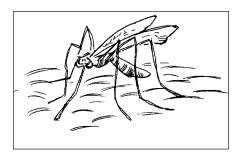
Why Should We Care?







Damage caused by Hurricane Andrew.







NOAA/NASA/EPA CLIMATE CHANGE PARTNERSHI

Global warming brings with it no guarantees. We don't know exactly what will happen—what the impacts will be—nor do we know exactly where or when they will hit hardest. But it is fair to say that scientists have a pretty good idea of what's to come. Scientists and researchers from various fields tell us that the possible effects of climate change could be far-reaching and, in some cases, would cause serious problems.

Among the potential impacts are increased human mortality, extinction of animal and plant species, and a dangerous rise in sea levels. With the evidence before us, we have to consider the costs of action and weigh them against the risks of inaction.

Health Impacts

An increase in global temperatures may have a negative effect on human health. Warmer temperatures can encourage the proliferation of disease-carrying mosquitoes in new areas, and thus could lead to the spread of infectious diseases such as encephalitis, malaria, and dengue fever.

In addition, hotter temperatures in the summer most likely would lead to a greater number of heat-related deaths. Severe weather events such as floods could increase. In poorer countries, malnutrition and starvation could increase as a result of droughts and other changes in the growing conditions for crops.

Environmental Impacts

A change in temperature and precipitation would most likely alter the composition of forests. Some forest ecosystems may disappear, leading to the extinction of several species.

In addition, climate change is projected to lead to an increase in sea level. Higher temperatures contribute to the melting of glaciers and sea ice, and the expansion of the oceans, which causes the sea level to rise. Sea level rise could erode beaches, create more damaging storm surges, lead to a loss of wetlands, and compromise drinking water supplies. Some island nations will disappear.

Climate change also is likely to increase the number of species listed as threatened or endangered. For example, when droughts are prolonged, the habitats required by ducks, frogs, and many other species dependent on ponds and streams will decline.

The effects of climate change on agriculture may be varied. Productivity is projected to increase in some areas for some crops and decrease in others. The direct effect of increased carbon dioxide on crops could compensate for the negative effects of climate change for some crops in some locations. However, large areas of the eastern and central United States may face moderate to severe drying. Drought could become more frequent, particularly in the Great Plains.

Economic Impacts

The economic impacts of climate change are hard to predict and will vary widely among nations and regions within nations. Some areas might see increased agricultural yields, others a decrease. Some of the negative economic impacts may include expensive clean-up operations from the expected increase in extreme weather events, and billions of dollars in property damage from sea level rise.